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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/739,506	12/18/2000	Leo Carl Christensen	US000344***	3124
24737	7590	12/20/2004	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS				BLOUNT, STEVEN
P.O. BOX 3001				
BRIARCLIFF MANOR, NY 10510				
		ART UNIT		PAPER NUMBER
		2661		

DATE MAILED: 12/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/739,506	CHRISTENSEN, LEO CARL
	<b>Examiner</b>	<b>Art Unit</b>
	Steven Blount	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 August 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 - 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1 - 11 is/are rejected.
- 7) Claim(s) \_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. ____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date ____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: ____ .

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. In claim 11, line 4, "inputs to K" is indefinite. Also, in line 1 of claim 6, "said K outputs" lacks antecedent basis, as the phrase "k outputs" is never explicitly mentioned before.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 - 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 3,761,894 to Pile et al in view of U.S. patent 6,208,641 to Ruuskanen et al.

With regard to claim 1, Pile et al teach a circuit for writing data to RAM 110(1), 110(2), etc. (see figure 1) during a first time interval, bit selectors (col 2 line 50 and col 5 line 40) for constructing data streams during a second time interval, the RA comprised of two parts, configured so that a read occurs from a first part while a write occurs to a second part, as described in col 2 lines 32+. Pile et al does not, however, teach the

data which is written into the RAM during the first operation to comprise writing “identical images” to the RAM, as required by lines 2+.

Ruuskanen et al teaches, in a similar system, that “During the write phase, the four-bit 8x4M output signal from multiplexers A1 – A4 is written simultaneously into each of the four switching memories under the control of a common write address counter” (col 4, lines 54+). Ruuskanen et al states that this is done to limit the size of the switch and its power consumption. See col 1, lines 43+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have written identical images of the data into the RAM of Pile et al, light of the teachings of Ruuskanen et al, in order to produce a more compact and power efficient circuit.

With regard to the following claims (hereinafter denoted as “CI”), note the following: CI 3: see address bus 107 in Pile et al; CI 4: note the controller in Ruuskanen et al mentioned above, the output streams mentioned above that are generated, and the split RAM construction mentioned above; CI 5: note the bus mentioned above; CI 6: it would be obvious for the bit rate of the outputs to be less than the bit rate of the bus in view of the operation performed by the circuit; CI 7: time switching is mentioned in the abstract of Pile et al, and with respect to the other claimed features, see the rejection of claim 1 above; CI 8 – 10: see the rejections above, particularly col 2 lines 32+ of Pile et al.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being obvious over the Applicants Admitted Prior Art (hereinafter “AAPA) in view of Pile et al and Ruuskanen et al.

AAPA states, in the background section of the specification, lines 12+, that “In broadcast systems, video and audio data are transmitted between N originating sources and M destination sinks...The control of a broadcast facility may involve rapid switching between many such sources and sinks...In time multiplexing, all sources and all sinks are connected to the same physical channel...When a switching system grows in terms of the number of sources and sinks it must handle, problems attend all three different kinds of systems. In time multiplexed systems, the bandwidth of the common physical channel has to be increased in proportion with the number of routes sharing the channel.” AAPA then states that “There is a perennial need for switches that handle digital data synchronously, and that must remain time aligned, and that do not grow in complexity too fast as the endpoint capacity of the switch increases.”

AAPA does not, however, teach the solution to this problem in the broadcasting systems to comprise writing identical images to memory during a first time interval, and reading them in a second time interval, including the use of bit selectors. This type of a system is taught in Pile et al/Ruuskanen et al, as discussed above. Note also that Ruuskanen et al discusses the motivation behind their invention (which would include the use of multiple RAM memory units that are identically imaged) to be having switches which are of a more compact size for a given amount of data (ie, a greater capacity switch) as discussed in col 1, lines 35 – 47.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have identically imaged and alternately read/written the broadcast data mentioned in AAPA in light of the teachings of Pile et al/Ruuskanen et al in order to

provide a switch capable of handling the increased data load associated with broadcast communications.

***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any response to this final action should be mailed to:

Box AF

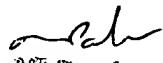
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Or faxed to: (703) 872 – 9306

For formal communications, please mark “EXPEDITED PROCEDURE”.

For informal or draft communications, please label “PROPOSED” or  
“DRAFT”.

Any inquiry concerning this communication should be directed to Steven Blount whose telephone number is (571) 272 – 3071. Examiner Blount may be reached Monday through Friday between the hours of 9:00 to 5:30. If attempts to reach the Examiner are unsuccessful, the Examiner’s Supervisor, Kenneth Vanderpuye, may be reached at (571) 272 – 3078.

  
Ajit Patel  
Primary Examiner

SB

12/9/04